Amendments to the Claims:

Listing of Claims:

1. (amended) A torque responsive actuation device comprising, a split pulley having a pair of upper and lower pulley halves forming a V slot therebetween to receive a drive belt; a cylindrical cam cone means maintained to extend outwardly from a center of a top face of said upper pulley half and including a plurality of equally spaced identical right triangle cam sections each including a like sloping cam track that extends along said right triangle hypotenuse side; a shaft means extending from said lower pulley half; a carrier means whereto are arranged a plurality of cam follower means that each include a roller bearing means for each said sloping cam track, with said carrier means maintained through a connector means to said lower pulley half, said connector means including a plurality of connectors, each connector being spaced away from the center of said lower pulley half and projecting through an opening formed in the upper pulley half, and each said cam following means roller bearing means includes a roller journaled thereto having a surface that contacts one of said sloping cam tracks, to roll therealong, and either said roller contact surface or said sloping cam track surface is radiused or crested, to be equally curved or sloped downwardly from a highest point or surface of each said sloping cam track to the sides of each said right triangle cam section; and spring biasing means for urging said carrier means away from said upper pulley half top face.

2. (Original) A torque responsive actuation device for a belt drive system as recited in claim 1, wherein either the roller contact surface or the sloping cam track surface is formed with a convex surface between said roller sides or said cam track sides to have a radius selected for the cylindrical cam cone cam track slope.

3. (amended) A torque responsive actuation device as recited in claim 2, wherein either the roller contact surface or the sloping cam track surface is formed to have a center apex [therearound or therealong wherefrom] and two like[, oppositely

sloping, flat surfaces slope] opposite surfaces sloping from the center apex to the roller sides or the sloping cam track surface sides.

4. (Original) A torque responsive actuation device as recited in claim 1, wherein the shaft means is a straight cylindrical shaft connected at its lower end to the pulley lower half, passes through the pulley upper half and connects, to its upper end to the carrier means; and the spring biasing means is a coil spring disposed around said straight cylindrical shaft between said upper pulley half and said carrier means.

5. (amended) [A torque responsive actuation device as recited in claim 1,] A torque responsive actuation device comprising, a split pulley having a pair of upper and lower pulley halves forming a V slot therebetween to receive a drive belt; a cylindrical cam cone means maintained to extend outwardly from a center of a top face of said upper pulley half and including a plurality of equally spaced identical right triangle cam sections each including a like sloping cam track that extends along said right triangle hypotenuse side; a shaft means extending from said lower pulley half; a carrier means whereto are arranged a plurality of cam follower means that each include a roller bearing means for each said sloping cam track, with said carrier means maintained through a connector means to said lower pulley half, and each said cam following means roller bearing means includes a roller journaled thereto having a surface that contacts one of said sloping cam tracks, to roll therealong, and either said roller contact surface or said sloping cam track surface is radiused or crested, to be equally curved or sloped downwardly from a highest point or surface of each said sloping cam track to the sides of each said right triangle cam section; and spring biasing means for urging said carrier means away from said upper pulley half top face, wherein the means for connecting the carrier means to the lower pulley half are a plurality of equally spaced piers that each include rods extending axially out of top ends thereof, which said piers are each secured, at their lower ends, to said lower pulley half hub, are each radially equidistant from the center of said lower pulley half and

will project at right angles through holes formed in the upper pulley half, with ends of said rods secured to said carrier means at approximately right angles to the undersurface thereof.

6. (amended) [A torque responsive actuation device for a belt drive system as recited in claim 1,] A torque responsive actuation device comprising, a split pulley having a pair of upper and lower pulley halves forming a V slot therebetween to receive a drive belt; a cylindrical cam cone means maintained to extend outwardly from a center of a top face of said upper pulley half and including a plurality of equally spaced identical right triangle cam sections each including a like sloping cam track that extends along said right triangle hypotenuse side; a shaft means extending from said lower pulley half; a carrier means whereto are arranged a plurality of cam follower means that each include a roller bearing means for each said sloping cam track, with said carrier means maintained through a connector means to said lower pulley half, and each said cam following means roller bearing means includes a roller journaled thereto having a surface that contacts one of said sloping cam tracks, to roll therealong, and either said roller contact surface or said sloping cam track surface is radiused or crested, to be equally curved or sloped downwardly from a highest point or surface of each said sloping cam track to the sides of each said right triangle cam section; and spring biasing means for urging said carrier means away from said upper pulley half top face, further including spaced holes formed through the carrier means that are identical arcuate slots, are spaced equally from one another, at equal radial distances from the carrier means and are aligned for receiving the right triangle cam sections fitted therein.

7. (original) A torque responsive actuation device as recited in claim 1, wherein the cylindrical cam cone is formed to have a bottom portion for securing to the top face of the upper pulley half.

8. A torque responsive actuation device comprising:

a split pulley having a pair of upper and lower pulley halves forming a V slot therebetween to receive a drive belt;

a cylindrical cam cone means maintained to extend outwardly from a center of a top face of said upper pulley half and including a plurality of equally spaced identical right triangle cam sections each including a like sloping cam track that extends along said right triangle hypotenuse side;

a shaft means extending from said lower pulley half, through a hub opening formed through said upper pulley half;

a carrier means whereto are arranged a plurality of cam follower means that each include a roller bearing means for each said sloping cam track, with said carrier means maintained through a connector means to said lower pulley half, said connector means including a plurality of connectors, each connector being spaced away from the center of said lower pulley half and projecting through an opening formed in the upper pulley half, and each said cam follower means roller bearing means includes a roller journaled thereto having a surface that contacts one of said sloping cam tracks, to roll therealong, and said roller contact surface is radiused or crested; and

a spring biasing means for urging said carrier means away from said upper pulley half top face.

9. The torque responsive actuation device of claim 8, wherein the roller contact surface is formed with a convex surface between roller sides to have a radius selected for the cylindrical cam cone cam track slope.

10. The torque responsive actuation device of claim 8, wherein the roller contact surface is formed to have a center apex therearound.

11. The torque responsive actuation device of claim 8, wherein the shaft means is a straight cylindrical shaft connected at its lower end to the pulley lower half, passes through the pulley upper half and connects, at its upper end to the carrier

means; and the spring biasing means is a coil spring disposed around said straight cylindrical shaft between said upper pulley half and said carrier means.

12. The torque responsive actuation device of claim 8, wherein the the connectors include a plurality of equally spaced piers that each include rods extending axially out of top ends thereof, which said piers are each secured, at their lower ends, to said lower pulley half hub, are each radially equidistant from the center of said lower pulley half and will project at right angles through the openings formed in the upper pulley half, with ends of said rods secured to said carrier means at approximately right angles to the undersurface thereof.

13. A torque responsive actuation device comprising:

a split pulley having a pair of upper and lower pulley halves forming a V slot therebetween to receive a drive belt;

a cylindrical cam cone maintained to extend outwardly from a center of a top face of said upper pulley half and including a plurality of equally spaced identical right triangle cam sections each including a like sloping cam track that extends along said right triangle hypotenuse side;

a shaft extending from said lower pulley half, through a hub opening formed through said upper pulley half;

a carrier whereto is arranged a plurality of cam followers that each include a roller bearing for each said sloping cam track, with said carrier maintained through a plurality of connectors to said lower pulley half, each connector being spaced away from the center of said lower pulley half and projecting through an opening formed in the upper pulley half, and each said cam follower roller bearing includes a roller journaled thereto having a radiused or crested surface that contacts one of said sloping cam tracks, to roll therealong; and

a spring for urging said carrier away from said upper pulley half top face.

14. The torque responsive actuation device of claim 13, wherein the roller contact surface is formed with a convex surface between roller sides.

15. The torque responsive actuation device of claim 13, wherein the roller contact surface is formed to have a center apex therearound wherefrom two like, oppositely sloping surfaces slope to the sides of the roller.

16. The torque responsive actuation device of claim 13, wherein the connectors include a plurality of equally spaced piers that each include rods extending axially out of top ends thereof, which said piers are each secured, at their lower ends, to said lower pulley half hub, are each radially equidistant from the center of said lower pulley half and will project at right angles through the openings formed in the upper pulley half, with ends of said rods secured to said carrier at approximately right angles to the undersurface thereof.

17. A torque responsive actuation device for a belt driven snowmobile comprising:

a drive belt having sides;

a split pulley having a pair of upper and lower pulley halves forming a V slot therebetween to receive the drive belt, said upper and lower pulley halves engaging the sides of the drive belt at varying distances from the center of the split pulley;

a cam cone maintained to extend outwardly from a center of said upper pulley half and including a plurality of equally spaced identical cam sections each including a like sloping cam track;

a shaft extending from said lower pulley half, through a hub opening formed through said upper pulley half;

a carrier whereto is arranged a plurality of cam followers that each include a roller bearing for each said sloping cam track, with said carrier maintained through a connector to said lower pulley half, and each said cam follower roller bearing includes a roller journaled thereto having a radiused or crested surface that contacts one of said sloping cam tracks, to roll therealong; and

a spring for urging said carrier away from said upper pulley.

18. The belt drive system for a snowmobile of claim 17 wherein the roller contact surface is formed with a convex surface between roller sides.

19. The belt drive system for a snowmobile of claim 17 wherein the roller contact surface is formed to have a center apex therearound wherefrom two like, oppositely sloping surfaces slope to the roller sides.

20. The belt drive system for a snowmobile of claim 17 wherein the connector includes a plurality of equally spaced piers that each include rods extending axially out of top ends thereof, which said piers are each secured, at their lower ends, to said lower pulley half hub, are each radially equidistant from the center of said lower pulley half and will project at right angles through holes formed in the upper pulley half, with ends of said rods secured to said carrier at approximately right angles to the undersurface thereof.

21. The belt drive system for a snowmobile of claim 17 wherein the cam sections are right triangle cam sections each including a like sloping cam track that extends along a hypotenuse side of the right triangle.

22. A torque responsive actuation device for a belt driven snowmobile comprising:

a drive belt having sides;

a split pulley having a pair of upper and lower pulley halves forming a V slot therebetween to receive the drive belt, said upper and lower pulley halves engaging the sides of the drive belt at varying distances from the center of the split pulley;

a cam cone maintained to extend outwardly from a center of said upper pulley half and including a plurality of equally spaced identical cam sections each including a like sloping cam track;

a shaft extending from said lower pulley half, through a hub opening formed through said upper pulley half;

a carrier whereto is arranged a plurality of cam followers that each include a roller bearing for each said sloping cam track, with said carrier connected through a plurality of

connectors to said lower pulley half, and each said cam follower roller bearing includes a roller that contacts one of said sloping cam tracks, to roll therealong, and each of said plurality of connectors being spaced away from the center of said lower pulley half and projecting through an opening formed in the upper pulley half to secure the carrier to the lower pulley half; and

a spring for urging said carrier away from said upper pulley.

23. The torque responsive actuation device of claim 22, wherein the plurality of connectors include a plurality of equally spaced piers that each include rods extending axially out of top ends thereof, which said piers are each secured, at their lower ends, to said lower pulley half hub, are each radially equidistant from the center of said lower pulley half and will project at right angles through the openings formed in the upper pulley half, with ends of said rods secured to said carrier at approximately right angles to the undersurface thereof.

24. The torque responsive actuation device of claim 23, wherein the shaft is a straight cylindrical shaft connected at its lower end to the pulley lower half, passes through the pulley upper half and connects, to its upper end to the carrier; and the spring is a coil spring disposed around said straight cylindrical shaft between said upper pulley half and said carrier.